

**Regulatory Advisory Panel (RAP) Meeting**  
Small Renewable Combustion Energy Permit by Rule  
August 31, 2011  
Draft Meeting Notes

**Location:** DEQ Central Office  
Richmond, VA 23219

**Start:** 9:35 a.m.

**End:** 4:14 p.m.

**RAP Leader/Facilitator:** Carol Wampler, DEQ

**Recorder:** Heather Mackey, DEQ  
Debra Miller, DEQ

**RAP Members Present:**

Ernie Aschenbach, DGIF (Alt)  
Tony Banks, VA Farm Bureau  
Bob Bisha, Dominion Virginia Power  
Kelly Bonds, Aegis  
Randy Bush, VA Forest Products Association  
John Hart, AEC Idom  
Rene Hypes, DCR (Alt)  
Larry Jackson, APCO

Ron Jenkins, DOF  
Roger Kirchen, DHR  
Thomas Numbers, ERM  
Tatyanna Patten, Public Policy Virginia (Alt)  
Rebekah Remick, DEQ  
Nikki Rovner, TNC  
Stephen Versen, VDACS

**RAP Members Absent:**

Ray Fernald, DGIF (Alt Present)  
Robert Greene, Ingenco  
Dan Holmes, PEC  
John Ignosh, VA Tech Extension  
Robin Jones, DMME  
Larry Land, VACO

Lynne Rhode, Troutman Sanders  
Scott Sklar, Stella Group  
Tom Smith, DCR (Alt Present)  
Al Weed, Public Policy Virginia (Alt Present)  
Donna Wirick, Recast

**Guests and Public Attendees:**

Kyle Whitehead, Covanta  
Kerri Nicholas, OAG  
Emil Avram, Dominion (Alt)  
Kathryn Perszyk, DEQ (Alt)

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**Agenda Item: Welcome & Opening Remarks**

**Discussion Leader: Carol Wampler, DEQ**

Ms. Wampler welcomed all attendees, and then summarized staff activities since the June 28 meeting that resulted in the draft Straw Man of the Combustion PBR being discussed at today's meeting, as follows: Staff had prepared a draft Straw Man of the PBR based upon RAP discussions at the last meeting. That draft Straw Man was then reviewed by both DHR and DGIF. Following discussions with both agencies, DHR and DGIF provided language for consideration and adjustments were made to the draft regulation addressing their concerns. The revised draft Straw Man presented to and discussed by the RAP today is the result of those discussions and subsequent adjustments.

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**Agenda Item: Discussion of Draft “Straw Man” Combustion PBR**

**Discussion Leader: Carol Wampler, DEQ**

Search for an adequate descriptive or “umbrella” term

Ms. Wampler opened the discussion of the draft Straw Man with consideration of the “umbrella” term being used to describe the statutory terms Biomass, Energy from Waste, and Municipal Solid Waste. Up to this point in the process, staff has been using the word “combustion” while seeking a term that adequately describes all fuels and processes that could potentially be involved in the three statutory terms/phrases. At its last meeting, the RAP considered using the term “thermal” rather than “combustion”; however, there was concern that there would be confusion with use of the term “thermal” in this context, versus use of the statutory term “geothermal” in the Water-related PBR.

In this draft Straw Man, staff put forward the term “heat” as an alternative to “combustion,” which the RAP felt at the June meeting did not adequately cover all potential projects. In addition to “heat” and “combustion,” RAP members suggested and discussed the following terms: “thermo-dynamic,” “bio-power,” “biomass energy,” “biogenic,” “renewable biomass fuel,” and “energy from recycled materials.” Each term in due course was fully discussed and ultimately. The following shortcomings were mentioned with respect to one or more of these terms: 1) creating a conflict with other statutory terms, such as use of the word “thermal” and “thermo-dynamic”; 2) not covering all possible fuel sources and projects, such as use of waste tires or crops grown for purposes of energy generation; 3) covering one or more, but not all three of the statutory terms, as in the case of “biomass energy”; or 4) covering too many potential fuel sources, such as petroleum-based fuels that are not deemed to be “renewable. The RAP discussion ultimately focused on the terms “biogenic” and “combustion,” and ended with the conclusion that there is no term that flawlessly encompasses all three statutory terms. A motion to retain the term “combustion,” was made and seconded, with the caveat that additional information on the meaning of the term in this context will be included in Guidance.

Jurisdictional question re: connection to the grid

Ms. Wampler then led the RAP in a discussion of the jurisdictional ramifications of connection to the grid. Theoretically, a project could exist that is so small that all electricity generated on site is used on site. In that case, there would be no need to connect to the grid in order to off-load excess energy. Two of the statutory requirements for the renewable energy PBR’s request the applicant provide copies of interconnection studies and final interconnection agreements to DEQ, which will not exist if there is no need to connect to the grid. The question was raised as to whether there is a statutory requirement that in order to qualify for the PBR, a small renewable energy project must connect to the grid. In its discussion, the RAP indicated that they interpret the statute as being meant to cover all projects that meet the size criteria, whether or not they connect to the grid. Kerri Nicholas, Office of the Attorney General, indicated that she would like to consider the question further, but that the statute does not specifically say that small renewable energy projects that do not connect to the grid are ineligible for the PBR.

Ms. Wampler suggested that the interconnection issue could be argued several ways. For example, with regard to the Wind PBR regulation, the Attorney General opined that no local government has land-use jurisdiction over projects located on state-owned subaqueous bottoms; therefore, there is no “governing body of the locality” that can certify that the project “complies with all applicable land use ordinances,” as

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the statute requires. The Attorney General's Opinion further provided that DEQ could authorize PBR coverage for these projects without this land-use certification, if the project satisfied the other statutory criteria. If one were to apply similar thinking to the interconnection issue, one could argue that DEQ can authorize PBR coverage for projects where there are no interconnection studies or agreements, as long as the project meets the other criteria. By contrast, one might also argue that DEQ has no jurisdiction over projects that do not connect to the grid – that is, because the statute requires interconnection studies and agreements be submitted to DEQ, one could infer that the General Assembly did not intend for the PBR to address projects that do not connect to the grid.

During the discussion, members of the RAP indicated that a project would typically be connected to the grid, regardless of size, in order to provide a “back up” power source. Members of the RAP were asked to think about whether or not there are combustion projects that, as a practical matter, would not be connected to the grid for discussion at the next RAP meeting.

Definitions discussion: “rated capacity,” “parasitic load,” “site,” “and project”

The RAP agreed by unanimous consensus on the definition of “rated capacity,” as presented in the Straw Man:

*“Rated capacity” means the maximum designed electrical generation capacity (in megawatts or kilowatts) of a small combustion energy project, minus the parasitic load; sometimes known as “net capacity.”*

The RAP discussed the term “parasitic load,” as presented in the Straw Man:

*“Parasitic load” means the maximum [DGIF suggests “minimum”] amount of electricity (in megawatts or kilowatts) a small combustion energy project uses to run its electricity-producing processes while operating at the rated capacity.*

There was discussion of the use of either “maximum” or “minimum” in the definition. One participant explained that there is only so much electricity consumed by a plant in the process of generating electricity, and that it is in the best interest of the operator to minimize his parasitic losses and be as efficient as possible in the plant's operations. He also noted that there would be very little difference in the calculation of parasitic load whether “minimum” or “maximum” was used. Some RAP members were comfortable with eliminating both “minimum” or “maximum” from the definition; others, however, felt more comfortable leaving in the word “maximum” to add clarity and provide direction for both the applicant and the reviewing agencies.

After further deliberation, RAP members agreed by unanimous consensus to retain the definition as noted in the Straw Man, with the term “maximum” in place.

The RAP discussed the definition of “site,” as presented in the Straw Man:

*“Site” means the area containing a combustion energy project that is under common ownership or operating control. Electrical infrastructure and other appurtenant structures up to the interconnection point, if the project is connected to the electrical grid, shall be considered to be within the site. Fuel processing, delivery, storage areas and associated conveyance equipment are considered part of the site if they (a) are contiguous and [DGIF*

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*suggests “or”] directly connected by continuous conveyor equipment to the project and (b) primarily exist to supply fuel for the generation of electricity.*

The RAP discussed the connection “and” and the DGIF suggestion of using “or” between (a) and (b) in the definition above. Some RAP members noted that use of “and” would potentially narrow the definition of what constitutes the “site.” It was suggested that a broad definition of site might bring storage areas and machinery not associated with energy generation into the definition (for example, the entire campus of a college that converts an old boiler building from coal burning to renewable fuels; or the entire farm where cows graze, as opposed to only the equipment that conveys cow manure into the boiler). Most RAP members seemed to prefer use of “and,” explaining that use of the word “or” might include more land area or structures than are warranted in the definition.

In addition, there was discussion about the phrase “under common ownership or operating control” in the first sentence of the definition of “site.” One RAP member questioned whether this sentence could be read to bring everything owned/operated by one entity into the definition of “site,” regardless of what is stated in the subsequent sentences. The current grammatical construction does not make the relationship among the sentences clear.

Finally, a RAP member suggested that some portion of or the entire third sentence in the proposed definition may belong under the definition for “project.” He suggested that decisions about the definition of “site” might become clearer after the RAP examined if and how that term creates responsibilities for the applicant to achieve in the operative provisions of the draft PBR. Accordingly, further discussion of the definition of “site” was postponed until the RAP reviewed the remaining Straw Man provisions. The RAP discussed the definition of “project,” as presented in the Straw Man, and suggested the following revisions:

*“Small combustion energy project,” “combustion energy project,” or “project” means a small renewable energy project that*

- (i) Generates electricity from combustion, whose main purpose is to supply electricity;*
- (ii) That utilizes a fuel or feedstock which is available on a renewable or recurring basis;*
- ~~(iii) Is addressed as a regulated solid waste by 9 VAC 20-81, 9 VAC 20-120, or 9 VAC 5-52020-60; is defined as biomass pursuant to §10.1-1308.1 of the Code of Virginia; or both; and~~*
- ~~(iv) (iii) Is designed for, or capable of, operation at a rated capacity equal to or less than 20 megawatts.~~*

*Combustion energy projects otherwise considered combined sources for air permitting shall be considered a single small combustion energy project.*

As explained by Debra Miller of DEQ’s Regulatory Affairs section, these regulatory and statutory citations bring into our “project” definition only those feedstocks that the RAP previously discussed as being appropriate for this regulation, while excluding those feedstocks that the RAP previously discussed as being inappropriate (e.g., waste oil and other fossil fuels). The definition also makes it possible for the RAP to avoid defining “biomass, energy from waste, and municipal solid waste” individually – an approach which may have merit, given the possibility that Congress and/or the General Assembly may continue to modify

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definitions of the terms. The RAP agreed by unanimous consensus with these aspects of the definition of "project." The RAP also agreed to delete phrases in (i) "whose main purpose is to supply electricity" and (ii) "is available on a renewable or recurring basis" as being unnecessary. Staff will revise the language of the definition to reflect these recommendations of the RAP.

In its final action prior to the lunch break, the RAP affirmed its consensus agreement not to define the three statutory terms, "biomass," "energy from waste," and "municipal solid waste" separately in this regulation.

*The RAP broke for lunch at 12:25 p.m. and reconvened at 1:35 p.m.*

**Agenda Item: Discussion of Draft "Straw Man" Combustion PBR continued**

**Discussion Leader: Carol Wampler, DEQ**

Following the lunch break, the RAP discussed Sections 9 VAC 15-70-40, 50, 60, 70, 90, 100 and 130 with the understanding that further discussion of any outstanding issues would be conducted at a follow-up meeting.

Section 9 VAC 15-70-40 Analyses

**Subsection A Wildlife Analysis:** Ms. Wampler noted that this subsection simply restates the regulation. Ms. Hypes from DCR's Division of Natural Heritage mentioned that in this and following sections, the DCR database for natural heritage resources is not referenced as a resource for wildlife analyses. DEQ staff noted that the language was taken from the Solar PBR and offered to review both draft regulations for references to DCR and other sister agency resource materials, and Ms. Hypes agreed to assist. Ms. Wampler also directed attention to Subsection C, which addresses requirements for the analysis of natural heritage resources within the disturbance zone and the internet resources listed in draft 9VAC15-70-120.

**Subsection B Historic Resources Analysis:** The RAP discussed Subsection B in detail, particularly items 3 and 4. In response to questions from the RAP membership, Roger Kirchen of DHR provided information concerning architectural and archaeological resources and analyses, the agency's desire to minimize viewshed impacts to historic settings that contribute to resource integrity, the agency's review and analysis of projects (such as cell towers) that may impact historic resources and settings, and various mitigation options. Discussion of item #3 indicated that DHR would like to see requirement for a field survey of architectural resources if a project exceeds 100', but is willing to consider a higher number. DGIF has suggested 200', which is at the higher end of what DHR would like to see. When considering cell tower viewshed impacts, the FCC requires a ½ mile radius study area for towers below 200'; between 200' and 400' a 1 mile radius study area is required, and above 400' the study area is 1.5 miles.

The RAP questioned whether DEQ's Air Division regulates stack height; the response being, only in terms of good engineering practice for air quality emissions considerations. A RAP member questioned whether a 5 or 10 MW plant would have a 100' tall stack.

As written, item #3 addresses viewshed analyses. Mr. Kirchen suggested adding language that was placed in the Wind PBR Guidance that gave the applicant the opportunity to demonstrate that, if a viewshed is not impacted by virtue of topography and/or vegetation. DEQ staff hereby provides the language in Section II Methodology of the Wind PBR Guidance document, which reads as follows:

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*Areas and properties that can be demonstrated through topographic or similar analyses to have no view to the project can be excluded from this study.*

Subsection C Analysis of Other Natural Resources: DEQ staff will work with DCR staff to add references to appropriate DCR Natural Heritage Resources databases, if needed.

Section 9 VAC 15-70-50 Determination of likely significant impacts.

Ms. Wampler advised the RAP that DGIF is considering whether adjustments to the language for Section 9 VAC 15-70-50 A 3 might be made, eliminating CAPZ 10, 11, and 12 from the list. Also, for Section 9 VAC 15-70-50 B impacts to historic resources, Ms. Wampler noted that DEQ anticipates developing guidance provisions that will list and explain the aspects of “integrity” as found in DHR and DOI guidance, just as has been done for the wind PBR guidance.

Section 9 VAC 15-70-60 Mitigation plan

The RAP discussed § 9 VAC 15-70-60 A, concerning a required consultation with DEQ as to whether a mitigation plan would be required. Although the RAP appeared to agree with the concept, they thought it probably would be better located within § 9 VAC 15-70-50, or within Guidance, if it is to be included. A question was asked concerning the meaning of language in Subsection B referring to development of a mitigation plan that is “reasonably and proportionately” related to the impact of the project on resources. DHR responded that the language was suggested in order to set the tone of negotiations between the applicant and the reviewing agencies. It is language typically found in DHR’s statements about historic-resources mitigation plans.

Section 9 VAC 15-70-70 Site plan

The RAP membership was divided in their discussion of Subsection 2 between those who felt the context map requirement within 5 miles of the site represented a burden to the applicant and those who felt it was a relatively insignificant requirement. One RAP member suggested incorporating a trigger determined by either disturbance zone or project size. The issue will be revisited at the next RAP meeting.

Section 9 VAC 15-70-90 Public participation

The RAP discussed the proposed public participation section and whether it was possible to streamline public participation requirements for projects requiring air, water, or waste permits in addition to small combustion energy project permits.

Section 9 VAC 15-70-100 Change of ownership, project modifications, termination

Subsection B project modifications was discussed in terms of the nature of the modification and whether it involved additional clearing of the site or structural alterations that might trigger the need for additional natural and historic resource analysis and/or mitigation. The draft Straw Man is written in terms of reductions or increases in the rated capacity, based largely on email input from a RAP member. The RAP discussed whether changes in rated capacity are the appropriate trigger in this context. Perhaps an increase in the size of the disturbance zone, or a change in building size, or stack height would be a more appropriate marker, so long as the rated capacity remains between 5 and 20 MW.

Section 9 VAC 15-70-130 De minimis

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This section of the Straw Man contains two versions for discussion, one by DHR and one by DGIF. By this time in the afternoon, DGIF staff was no longer present; therefore, the RAP only discussed the DHR version.

There was discussion of Subsection B which is the 'middle tier' projects with a rated capacity greater than 500 kW and less than or equal to 5 MW. For these projects, the DHR version requires a desktop survey of known resources within ½ mile of the site, a T&E desktop, and local government certification of compliance with local land use laws. Currently, the Straw Man reads that the results of an applicant's historic resources archives search and wildlife desktop survey are to be submitted to the local governing body where the project is located. Although not present at the meeting, Larry Land of VACO had provided comments on this section of the Straw Man to Ms. Wampler. VACO has concerns about submission of these desktop studies to the local government, which can be addressed further at a future RAP meeting.

Concerning Subsection B, it was suggested that this middle tier may be unnecessary, and that this subsection could actually be removed in favor of a pure 5 MW de minimis exemption. Several RAP members voiced support for this idea, which will be discussed further in the next meeting.

**Public Forum**

No one signed up to speak during the public forum.

**Adjournment**

The meeting adjourned at 4:14 p.m. The RAP will be contacted concerning convenient dates for its next (and perhaps final) meeting. Staff will prepare and circulate draft Minutes. Staff will prepare a revision of the 8/19/11 Straw Man draft based on today's discussion for consideration prior to the next RAP meeting.



draft straw man from  
8 31 11 mtg.docx

Attachment 1: 8/19/2011 Draft Combustion PBR "Straw Man," as revised during the 8/31/11 RAP meeting.